



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,971	07/24/2006	Greg Hakonson	P544 0002/GNM	4078

720 7590 08/07/2008  
OYEN, WIGGS, GREEN & MUTALA LLP  
480 - THE STATION  
601 WEST CORDOVA STREET  
VANCOUVER, BC V6B 1G1  
CANADA

EXAMINER
----------

PATEL, TARLA R

ART UNIT	PAPER NUMBER
----------	--------------

3772

MAIL DATE	DELIVERY MODE
-----------	---------------

08/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,971	<b>Applicant(s)</b> HAKONSON ET AL.	
	<b>Examiner</b> TARLA R. PATEL	<b>Art Unit</b> 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 71-94 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 71-94 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/18/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 1/18/06. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

2. The abstract of the disclosure is objected to because abstract should be in separate sheet. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

4. Claims 72-90 and 92-94 are objected to because of the following informalities:  
  
The claims 72-90 and 92-94 shows dependency from the cancelled claim, that is not correct dependency of pending claims. As best understood by the examiner

the claims have been interpreted as being dependent as follows: The claim 72 depends from 71.

The claim 73 depends from 72.

The claim 74 depends from 72.

The claim 75 depends from 74.

The claim 76 depends from 75.

The claim 77 depends from 76.

The claim 78 depends from 73.

The claim 79 depends from 72.

The claim 80 depends from 79.

The claim 81 depends from 80.

The claim 82 depends from 81.

The claim 83 depends from 72.

The claim 84 depends from 83.

The claim 85 depends from 84.

The claim 86 depends from 72.

The claim 87 depends from 71.

The claim 88 depends from 87.

The claim 89 depends from 71.

The claim 90 depends from 89.

The claim 92 depends from 91.

The claim 93 depends from 92.

The claim 94 depends from 91.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 71-74 and 78-81 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuiper et al. (2004/0010212).

Kuiper et al. discloses a device for supporting an anatomical structure (10 as discloses to support calf and foot is broadly interpreted as anatomical structure of user), the device comprising a first body-encircling member (as broadly interpreted the first body-encircling member, the examiner interprets inner layer 24 as first body-encircling member of require claim), a second body-encircling member (as broadly interpreted the second body-encircling member, the examiner interprets outer layer 22 as second body-encircling member of require claim) and at least one actuator (68) connected between the first and second body-encircling members (see figure 3), the actuator comprising an inflatable bladder (26) having an asymmetrically elastic wall [0014, 0021] wherein the wall constrains the bladder to expand preferentially along an axis upon inflation such

that inflation of the bladder applies force to force the first and second body-encircling members apart [0070, as disclosed walls expands under the pressure therefore applies force].

With respect to claim 72, Kuiper et al. discloses the bladder comprises a plurality of transversely-spaced generally-parallel tubular portions (see figures 2-3) in fluid communication through at least one manifold (62).

With respect to claim 73, Kuiper et al. discloses the tubular portions are closely-spaced to provide a palisade-like arrangement when the bladder is inflated (please see figure 3).

With respect to claim 74, Kuiper et al. inherently discloses the tubular portions press against one another and support one another against deflection in a transverse direction when the bladder is inflated (see figure 3).

With respect to claim 78, Kuiper et al. inherently discloses that the wall of the bladder has a higher modulus of elasticity on inward-facing sides of the tubular portions of the actuator than on outward-facing sides of the tubular portions of the actuator [0013,0014].

With respect to claims 79-80, Kuiper et al. inherently discloses the wall comprises an air-impermeable layer [0014, as disclosed that the bladder is liquid filled, therefore require the wall to be air-impermeable] further disclosed that the double-walled bladder [0021] is interpreted as two layers of asymmetrically-elastic material joined at [0077] at longitudinally-extending seams (48) wherein a high-stretch direction of the material is oriented lengthwise relative to the tubular portions (see figure 6).

With respect to claim 81, Kuiper et al. discloses a fabric material [0076] around the bladder is interpreted as a low-stretch direction of the material is oriented circumferentially around the tubular portions.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 75-77 and 82-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuiper et al. in view of Nickels et al. (6,237,602).

Kuiper et al. substantially discloses the invention, please see rejection to claims 71-74 and 78-81 above, further, Kuiper et al. discloses the bladder expands preferentially in an direction lying substantially in a surface defined between the first and second body encircling members (see figure 3); however, Kuiper et al. does not discloses that the first and second body encircling members are dimensioned to extend around a waist of a person, and actuator extends through an angle which is less than 180 and 270 degrees as measured relative to a central point on a coronal midline of a person wearing the device, further the tubular portions are generally cylindrical when the bladder is inflated and wherein portions of the guide that contact the tubular portions are generally cylindrical when the bladder is inflated, actuator is generally rectangular and has a width in direction along the body-encircling members that is greater than a height

Art Unit: 3772

extending between the members, tubular portions extend substantially at right angles, actuator has high modulus of elasticity, guide constrains the expansion of the tubular portion, thereby causing the actuator to bend when the bladder is inflated, device is dimensioned to apply unloading force to a lumbar spine of a person, wherein actuator does not extend across a front of a person, actuator located to be adjacent to hip.

However, Nickels et al. teaches a flexible fluidic force generator includes force generator body that has a longitudinal dimension and has a fluid chamber defined therein (abstract) to be used around the waist of a person (see figures 7, 10-11a) generally cylindrical when the bladder is inflated (see figure 8), actuator extends through an angle which is less than 180 and 270 degrees as measured relative to a central point on a coronal midline of a person wearing the device (see figures 10-11a and column 6 lines 51-63, as disclosed and shown to use the device at a waist of the user obviously extend an angle which is less than 180 and 270 degrees relative to a central point on a coronal midline), tubular portions extend substantially at right angles to the body-encircling members (see figure 8, column 5 line 62-column 6 line 9), actuator (68) does bend when inflated (see figure 10-10a), device is dimensioned to apply unloading force to a lumbar spine of a person (column 6 lines 51-63), wherein actuator does not extend across a front of a person (see figures 11-11a), actuator located to be adjacent to hip (see figure 7).

At the time of the invention was made, it would have been obvious to one having ordinary skill in the art to use the teaching of cylindrical bladder to be used around the waist of a person generally cylindrical when the bladder is inflated, actuator extends

Art Unit: 3772

through an angle which is less than 180 and 270 degrees as measured relative to a central point on a coronal midline of a person wearing the device, tubular portions extend substantially at right angles to the body-encircling members, bendable actuator, device is dimensioned to apply unloading force to a lumbar spine of a person, wherein actuator does not extend across a front of a person, actuator located to be adjacent to hip to the device of Kuiper et al., as taught by Nickels et al. to support the spine of the user and contour the curve spinal area of the user around the waist.

With respect to claims 91-94, Kuiper et al. and Nickels et al. disclose a method for supporting a body part as claimed. as described above, Kuiper et al. and Nickels et al. disclose all the structural limitations of a device as claimed.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walldridge et al. (2005/0143683) discloses a wrap adapted to selectively pressurization and depressurization sequence of select compartments within select regions of the wrap. Grim (Re 34,883) discloses simplified orthopaedic back support. Zablotsky et al. (5,450,858) discloses lumbosacral belt comprise inflatable bladder. Nichols et al. (3,521,623) discloses back brace comprising bladders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARLA R. PATEL whose telephone number is (571)272-3143. The examiner can normally be reached on M-T 6-3.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tarla R Patel/  
Examiner, Art Unit 3772

/Patricia Bianco/  
Supervisory Patent Examiner, Art Unit 3772